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[54] **ACTUATED RECOIL ABSORBING MOUNTING SYSTEM FOR USE WITH AN UNDERWATER GUN**

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[58] **Field of Search** 89/43.01, 37.14, 89/42.01

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[57] **ABSTRACT**

An actuated recoil absorbing mounting system is used to reduce recoil velocities and to absorb the recoil energy from an underwater projectile launcher, such as a high discharge energy underwater gun. The recoil absorbing mounting system includes a projectile launcher frame that supports the projectile launcher during firing. The projectile launcher frame is slideably supported by one or more launcher frame supports to allow movement substantially in a linear direction. One or more recoil plates are coupled to the underwater projectile launcher frame to provide hydrodynamic added or virtual mass and damping to the projectile launcher frame and projectile launcher. The recoil absorbing mounting system further includes one or more actuators for repositioning or returning the projectile launcher frame and projectile launcher to an original position after firing.

10 Claims, 3 Drawing Sheets

